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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---------------------------|-----------------------|----------------------|---------------------|-----------------|--|
| 10/776,564 | 02/11/2004 | Unal Gazyakan | ZAHFRI P607US | 2782 | |
| 20210 | 7590 06/06/2005 | | EXAM | EXAMINER | |
| DAVIS & BUJOLD, P.L.L.C. | | | LORENCE, RICHARD M | | |
| FOURTH FLO 500 N. COMN | OOR MERCIAL STREET | | ART UNIT | PAPER NUMBER | |
| MANCHESTER, NH 03101-1151 | | | 3681 | | |
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DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|------------------------------|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | | |
| Office Action Summary | 10/776,564 | GAZYAKAN ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| TL- MAN INO DATE - CALL | Richard M. Lorence | 3681 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 11 February 2004. | | | | | | | |
| | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>7-12</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>7-12</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | | | |
| Application Papers | | | | | | | |
| 9)⊠ The specification is objected to by the Examiner. | | | | | | | |
| 10)⊠ The drawing(s) filed on <u>11 February 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | | |
| 1.⊠ Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | | | | | | |
| Attachment(s) | | | | | | | |
| 1) Motice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Ll Interview Summary Paper No(s)/Mail D | | | | | | |
| Notice of Draitsperson's Patent Drawing Review (P10-940) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/11/05. | r | Patent Application (PTO-152) | | | | | |
| · apor recognition batto <u>at 1 1700</u> . | J) | | | | | | |

DETAILED ACTION

This is the first Office action on the merits of Application No. 10/776,564 filed on February 11, 2004. The preliminary amendment has been entered. Claims 7-12 are currently pending.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The replacement drawing sheet was received on February 11, 2004. This drawing appears to be identical to the original.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment of claim 12 wherein the spindle nut is fixed and the spindle can be rotated must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are further objected to because the extraneous arrow heads in the vicinity of the lead lines associated with reference numerals 20 and 24 should be deleted.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the subject matter of claim 12. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

The disclosure is further objected to because in line 1 of paragraph [034] "pivotably" apparently should read - - rotatably - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the gear wheel" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested that the dependency of the claim be changed so as to depend from claim 8 rather than claim 7.

Claim Rejections - 35 USC § 102/103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 9-12 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kirkwood et al. (US 2004/0163918).

Kirkwood et al. discloses a transfer case 22 which as seen in Figure 2 includes a controllable clutch 50 for distributing torque coming from an input shaft, i.e., the output shaft of the transmission which is connected to the splined end segment 64 as described at lines 4-6 of paragraph [0030], to outputs shafts 32, 42. The output shaft 42 can be connected to the drive shaft via the clutch 50. The clutch can be actuated by an electric motor 110 and a drive converter device 112 arranged between the motor and the clutch. The drive converter converts rotary motion of the motor into translatory motion for actuating the clutch.

While Kirkwood et al. does not explicitly state that the motor is an induction motor, this is believed to be the case since the stator 116 and the windings 118 are

secured to the housing 60 such that no brushes are required. Alternatively it is believed that one having ordinary skill in the art would recognize that an induction motor could be used as the source of rotary motion for the drive converter, since induction motors were widely recognized at the time the invention was made as a suitable means for providing rotary motion.

Regarding claim 9 note that the housing 60 of the motor also serves as a mount for the gear wheel 102 which is supported on the housing via the bearings 62.

With respect to claims 10 and 12 see Figure 3 which shows in more detail the drive converter comprising the spindle 134 rotatable by the motor and the fixed nut 142.

Figures 4A and 4B show the alternative arrangement were the motor rotates the nut as set forth in claim 11.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 7 and 10-12 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al. (US 4,895,236 A).

Sakakibara et al. discloses a transfer case 9 which as seen in Figures 4 and 6 includes a controllable clutch 45 for distributing torque coming from an input shaft 15 to outputs shafts 31, 44. The output shaft 44 can be connected to the drive shaft via the clutch 40. The clutch can be actuated by an electric motor 47 and a drive converter

device 56 arranged between the motor and the clutch. The drive converter converts rotary motion of the motor into translatory motion for actuating the clutch.

While Sakakibara et al. discloses the motor as being a DC motor, it is believed that one having ordinary skill in the art would recognize that an induction motor could be used as the source of rotary motion for the drive converter, since induction motors were widely recognized at the time the invention was made as a suitable means for providing rotary motion.

With respect to claims 10 and 11 see Figure 6 which shows the drive converter comprising the nut 53 rotatable by the motor and the fixed spindle 53.

Figure 8 shows the alternative arrangement were the motor rotates the spindle as set forth in claim 12.

Double Patenting

Claims 7-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-15 of copending Application No. 10/776,567. Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ primarily in the terminology used rather than the structure described. While preamble of the claim 7 of the present application recites "A transfer case with a controllable clutch" the claims of the co-pending application recite a "A distributor gear with an adjustable coupling". It is clear from the drawing figures and the description of the two applications that the

claimed structure is the same. Further, the induction motor recited in claim 7 of the present application is apparently the same as the rotating field motor set forth in claim 11 of the '567 application. The subject matter of claim 8 is set forth in claim 10 of the '567 application; the subject matter of claim 9 is set forth in claim 12 of the '567 application; the subject matter of claim 10 is set forth in claim 13 of the '567 application; the subject matter of claim 11 is set forth in claim 14 of the '567 application; and the subject matter of claim 12 is set forth in claim 15 of the '567 application. As such the apparatus set forth in claims 7-12 of the present invention would have been obvious to one having ordinary skill in the art in view of the apparatus set forth in claims 9-15 of the '567 application and vice-versa.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Prior Art Citation

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited by applicant in the IDS filed on February 11, 2004 has been considered. The examiner further cites Granzow et al. '921 which corresponds to the copending '567 application which forms the basis for the provisional obviousness-type double patenting rejection; and Botterill et al. '235, Vonnegut et al. '857 and Puiu et al. '550 each of which show a transfer cases with a controllable clutch.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Richard M. Lorence whose telephone number is (571)

272-7094. The examiner can normally be reached on Mondays through Fridays from

9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

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Business Center (EBC) at 866-217-9197 (toll-free).

Richard M. Lorence Primary Examiner Page 9

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Lorence/rml